



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,384	07/09/2002	Cornelis F.T. Visser	000771.00029	4552

22907 7590 02/25/2004

BANNER & WITCOFF
1001 G STREET N W
SUITE 1100
WASHINGTON, DC 20001

EXAMINER

JACKSON, ANDRE K

ART UNIT	PAPER NUMBER
----------	--------------

2856

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/070,384

Applicant(s)

VISSER, CORNELIS F.T.

Examiner

André K. Jackson

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 16 and 18 objected to because of the following informalities:

Regarding claims 16 and 18, both claims depend on cancelled claim.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Oetiker et al.

Regarding claim 4, Oetiker et al. disclose a "Process and device for continuously determining the moisture content of spoilable foodstuffs" which has a supply vessel (16, measurement housing) placed on a weighing device (17, 2), a feed device (70, compartment), a discharge device (23, product outlet), and a computer (9).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andersen et al. in view of Miller et al.

Regarding claim 1, Andersen et al. disclose in "Acoustic volume and torque weight sensor" where the volume of a quantity of bulk material is determined; the weight of the quantity of the bulk material is determined (Abstract). What is not disclosed by Andersen et al. is the density is then determined from the volume and the weight. However, Miller et al. disclose in "Method and means of controlling a flood extruder as a function of bulk density of the extruded product" where the density is then determined from the volume and the weight (Columns 1 and 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Andersen et al. to include where the density is then determined from the volume and the weight as taught by Miller et al. By adding this feature the user would be able to determine density from two known parameters. What is not disclosed is determining the moisture content by comparing the density with a comparison table. However, it is well within the purview of the skilled artisan to use the method taught by Andersen et al. and compare the result to a table to establish the accuracy of the method used.

Regarding claim 2, Andersen et al. disclose where the volume of a quantity of bulk material is determined; and the weight of the quantity of the bulk material is

determined (Abstract). What is not disclosed by Andersen et al. is adding water to the quantity of bulk material until the weight associated with the desired moisture content is obtained. However, Miller et al. disclose adding water to the quantity of bulk material until the weight associated with the desired moisture content is obtained (Column 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Andersen et al. to include adding water to the quantity of bulk material until the weight associated with the desired moisture content is obtained as taught by Miller et al. By adding this feature the apparatus would be able to bring the moisture content of the grain up to an optimum level.

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hane.

Regarding claim 1, Hane discloses a "Method for measuring the moisture ratio of organic material and apparatus herefor" where the volume of a quantity of bulk material is determined (Column 2, lines 33-35), the weight of the quantity of the bulk material is determined (Column 1, lines 40 and 41), the density is then determined from the volume and the weight (Column 6, lines 60-65). What is not disclosed is determining the moisture content with a comparison table. However, it is well within the purview of the skilled artisan to use the method taught by Hane et al. and compare the result to a table to establish the accuracy of the method used.

7. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hane in view of Cherry et al.

Regarding claim 2, Hane discloses where the volume of a quantity of bulk material is determined (Column 2, lines 33-35) and the weight of the quantity of the

bulk material is determined (Column 1, lines 40 and 41). What is not disclosed by Hane is adding water to the quantity of bulk material until the weight associated with the desired moisture content is obtained. However, Cherry et al. disclose a "System and method for monitoring water content or other dielectric influences in a medium" which describes adding water to the quantity of bulk material until the weight associated with the desired moisture content is obtained (Column 13, lines 21-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Hane to include adding water to the quantity of bulk material until the weight associated with the desired moisture content is obtained as taught by Cherry et al. since they are from the same field of endeavor.

Regarding claim 3, Hane does not disclose mixing the water with the bulk material. However, Cherry et al. disclose mixing the water with the bulk material (Column 13, lines 21-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Hane to include mixing the water with the bulk material as taught by Cherry et al. since mixing would distribute the water evenly.

8. Claims 5-7,9 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oetiker et al. in view of Bajema et al.

Regarding claim 5, Oetiker et al. disclose a feed device, which does not comprise a conveyor belt. However, Bajema et al. disclose a "Ground-crop harvester control system" which has a feed device, which does comprise a conveyor belt (20), a height sensor (abstract) and a computer (controller 100). Therefore, it

would have been obvious to one of ordinary skill in the art at the time of invention to modify Oetiker et al. to include a conveyor as a feed device, a height sensor and a computer as taught by Bajema et al. This addition would make it easier to transport the bulk material since the material may become stuck in the feed device of Oetiker et al.

Regarding claim 6, Oetiker et al. do not disclose where the measuring member comprises a laser source and a laser detector to determine the height of the material carried on the conveyor. However, Bajema et al. disclose where the measuring member comprises a laser source and a laser detector to determine the height of the material carried on the conveyor (Column 11, lines 55-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Oetiker et al. to include where the measuring member could comprise a laser source and a laser detector to determine the height of the material carried on the conveyor as taught by Bajema et al. since this would make the measuring member more accurate.

Regarding claim 7, neither Oetiker et al. nor Bajema disclose where there is a leveling device placed above the conveyor belt upstream of the measuring member for leveling to a uniform height the material carried along the conveyor belt. However, it is well within the purview of the skilled artisan to have a constant height for the material carried along the conveyor belt in order for there to be a consistent measurement with the material.

Regarding claim 12, neither Oetiker et al. nor Bajema disclose where there is a leveling device placed above the conveyor belt upstream of the measuring member for leveling to a uniform height the material carried along the conveyor belt. However, it is well within the purview of the skilled artisan to have a constant height for the material carried along the conveyor belt in order for there to be a consistent measurement with the material.

Regarding claims 9 and 13-16, it is considered a design choice and well within the purview of the skilled artisan to have a supply vessel that is tiltable to ensure that all of the material is out of the vessel.

9. Claims 10-11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oetiker et al. in view of Miller et al.

Regarding claim 10, Oetiker et al. do not disclose where the water supply device is placed above the supply vessel in order to supply water to the vessel. However, Miller et al. disclose where the water supply device is placed above the supply vessel in order to supply water to the vessel (Figure 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Oetiker et al. to include where the water supply device is placed above the supply vessel in order to supply water to the vessel as taught by Miller et al. By adding this feature the user would be able to place the water directly on to the material while in the supply vessel.

Regarding claim 11, Oetiker et al. do not disclose where the apparatus is provided with a dispensing device for dispensing additives. However, Miller et al.

disclose where the apparatus is provided with a dispensing device for dispensing additives (Figure 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Oetiker et al. to include where the apparatus is provided with a dispensing device for dispensing additives as taught by Miller et al. By adding this feature the user would be able to add different additives to the material and perform various measurements with those additives involved.

Regarding claim 20, Oetiker et al. do not disclose where the apparatus is provided with a dispensing device for dispensing additives. However, Miller et al. disclose where the apparatus is provided with a dispensing device for dispensing additives (Figure 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Oetiker et al. to include where the apparatus is provided with a dispensing device for dispensing additives as taught by Miller et al. By adding this feature the user would be able to add different additives to the material and perform various measurements with those additives involved.

10. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oetiker et al. in view of Bajema et al. as applied to claim 5 above and in further view of Miller et al.

Regarding claim 17, neither Oetiker et al. nor Bajema et al. do not disclose where the water supply device is placed above the supply vessel in order to supply water to the vessel. However, Miller et al. disclose where the water supply device is

Art Unit: 2856

placed above the supply vessel in order to supply water to the vessel (Figure 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Oetiker et al. to include where the water supply device is placed above the supply vessel in order to supply water to the vessel as taught by Miller et al. By adding this feature the user would be able to place the water directly on to the material while in the supply vessel.

Regarding claim 19, Oetiker et al. do not disclose where the apparatus is provided with a dispensing device for dispensing additives. However, Miller et al. disclose where the apparatus is provided with a dispensing device for dispensing additives (Figure 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Oetiker et al. to include where the apparatus is provided with a dispensing device for dispensing additives as taught by Miller et al. By adding this feature the user would be able to add different additives to the material and perform various measurements with those additives involved.

Response to Arguments

11. Applicant's arguments filed 11/13/03 have been fully considered but they are not persuasive.

Applicant has argued that claim 1 is directed to measuring the moisture content of bulk material. Bulk material is given the broadest interpretation

and there is nothing in the claim that states wood is not bulk material as seen in the Hane invention.

Applicant has argued that the process of claim 1 does not obtain moisture ratio because the weight of the dry bulk material is not known or determined. Claim 1 only recites determining the weight of the bulk material. There is no recitation for measuring dry bulk material only a recitation for measuring bulk material. Therefore, if the material is wet or dry the claim is concerned with measuring the weight of the bulk material. Hane achieves this in the invention.

Applicant has argued that claim 2, relies on the volume and weight. However, there is nothing in the claim that would suggest that the weight and volume are relied upon for anything. The claim recites that the volume is determined and the weight is determined. Those values are just determined according to the claim. The claim never states what those values are used for or how they are used to determine anything.

Applicant has argued that Oetiker et al. do not measure the weight of a predetermined volume of grain and then determine the moisture. However, measuring a weight from a predetermined value is not claimed. Therefore, Oetiker et al. disclose all of claim 4.

Applicant has argued that Oetiker et al. do not teach or suggest a weighing device for measuring the moisture content of bulk material. The claim does not suggest such an apparatus either. The claim recites "a supply vessel

placed on a weighing device; a feed device for feeding predetermined volumes to the supply vessel; a discharge device for the supply vessel; and a computer for determining the moisture content from the supplied volume and measured weight". There is no suggestion in the claim that the weighing device determines the moisture content. The claim recites that the computer determines the moisture content.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to André K. Jackson whose telephone number is (571) 272-2196. The examiner can normally be reached on Mon.-Thurs. 7AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

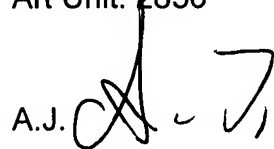
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/070,384

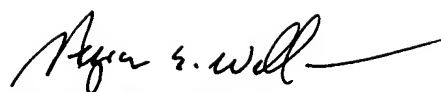
Page 12

Art Unit: 2856

A.J.

A handwritten signature in black ink, appearing to be 'A.J. Williams', with a stylized flourish at the end.

February 20, 2004

A handwritten signature in black ink, appearing to be 'Hezron Williams', with a long horizontal flourish extending to the right.

HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800